BRUHAT BANGALORE MAHANAGARA PALIKE
YELAHANKA ZONE

Estimate Cost Rs. 4500000.00

Name of Work: Detailed Estimate for the Work of Drilling of borewell and providing pipe line at Harohalli, Nagenahalli and Kenchenahalli in ward No-02 of yelahanka Sub Division.

Sl No	Description of item	Unit	No	L	B	D	Qty	Rate	Amount
1	Geophysical investigation of site for sinking Borewell for supplying drinking water to the habitation either through the Hand pump, MWS of P.W.S.S by vertical electrical sounding by adopting Venner or Schlumberger's method, including reconnaissance survey of geological formation, Gerophysical investigation of existing Ground Wate in the vicinity, its qualityf 1.0 meter in consolidated formation for proper seating of casing pipe, depth of drilling required to cover full depth of aquifer proposed to be tapped, probable yield and other information required including transportation of instrument and accessories to work site., engaging techinical personal and labour required etc., as per Specification and direction **(P.38, I. 9.4) PRED.SR 2010-11**	Each BW		Nagenahalli, Harohalli and Kenchenahalli					
			7				7	1900.00	13300.00
2	Sinking borewell of 165 mm dia clear using super fast hydraulic rig of capacity 250 PSIG & above CFM & above in all strats including over burden upto 20 mts fixing of casing pipes, collars and cap with necessary cutting, throading and welding including transportation of rig and supporing vehicles, crew charges and cost of consumables etc., complete including yield testing at the final depth with a minimum working of compressor for one hour (excluding coat of casing pipes, collars, cap etc.,) **P. 36 / I. 9.1 PRED SR 2010-11**	Rmtr							
	0 to 50 m		7	50.00			350.00	287.00	100450.00
	50 to 100 m		7	50.00			350.00	379.00	132650.00
	100 to 150 m		7	50.00			350.00	422.00	147700.00
	150 to 200 m		7	50.00			350.00	464.00	162400.00
	200 to 250 m		7	50.00			350.00	513.00	179550.00
	250 to 300 m		7	20.00			140.00	550.00	77000.00
3	Supply of ISI mark 175 mm nominal bore medium black ERW casing pipe of 5 mm thick black electric resistance continuous welded mild steel tube material confirming to IS 1387 / 1993 & manufactured from hot rolled steel skelp / stripes in random length of 4 to 7 mts both ends threaded confirming to IS 554 / 1985, one end fixed with a socket and the other and with a plastic protection end (including of all taxes) **SE PRED Approved Rate**	Rmtr							
			7	35.00			245.00	1325.00	324625.00
4	Providing 250mm dia PVC Pipe 6kg/cm **SE PRED Approved Rate**	Rmtr							
			7	6.00			42.00	683.00	28686.00

Sl No	Description of item	Unit	No	L	B	D	Qty	Rate	Amount
	Providing 175mm dia M.S Collar **SE PRED Approved Rate**	Each							
			28				28	150 00	4200.00
6	Providing and fixing 175mm Borewell Cap	Each	7				7	100 00	700.00
7	Supply and delivery at site brand New texmo/ innoval/ Lubi/ Sabar / Atalanta/ Calamal/ make suitable for vertical installation in 150mm dia bore well comprising of single stage or multistage CF pump close coupled by meaans of stainless steel coupling to suitable HP suitable speed totally enclosed and filled with pure drinking water (Wet type) squirrel cage submersible induction motor suitable for opertation of 3PH, 50 Hz, 380/440 volts AC supply fitted with required aqccessories such as suction, casing suction strainers sand guard Non return value etc. complete . The pump and motor shall form an integral unit with all the required fittings 12.50 HP 20 stage. **SE RDED Approved Rate**	No							
	12 5 HP 20 Stage		7				7	44000 00	308000.00
8	Supplying of ISI marked galvanized mild steel tube (continously welded electric resistance welded (ERW) high frequency, induction welded (HFIW) Hot finished welded type of nominal bore given below screwed at both ends as per IS 554/1986 with latest amendments, pipes threaftes at one end and the other end protected asper specification in random lengths of 4 to 7 mtrs Confirming to IS 1239 part I/1990 with amendament 1-5 and with all its latest amendements if any. The pipes supplied should be with BIS mark No 3/08-09 2406/15 10 2008. **50 mm dia including Collar Heavy Class**	Rmtr							
			7	240 00			1680.00		
	for Existing borewell		1	200.00			200.00		
							1880.00	325 00	611000.00
9	Supplying and drawing 3 core flat PVC sheathed submersible pump cable manufactured with electrolytic grade copper with flexible copper conductor confirming to table 3 class 5 of IS.8130-1984 and virgin grade PVC insulation and sheathed suitable for working voltage upto 1100 Volts. P. No. 49/ I No. 29-b(1)4 **Sqm mm of 36 strands 0.3mm dia Group - A KPWD Electrical SR 2010-11**	Mtr							
			14	240 00			3360.00		
	for Existing borewell		2	200 00			400.00		
							3760.00	151.00	567760.00
10	Erection of pumpset including aligning and balancing with all necessary erection materials and labour including supply and erection of one pair supporting clamps, one borewell cap. Cable clips with bolts, nuts, valves guages etc., involoved in the job (Necessary GI pipe and specials with be supplied by the board at the site free of cost) **RDED Approved Rate Erroction of pump motor to borewell.**	No							
			7				7	1710.00	11970.00

Sl No	Description of item	Unit	No	L	B	D	Qty	Rate	Amount
11	Supplying and fixing 20"x20"x2.5" polished wood board made of not less than 15mm thick plank on both sides with planks made out of not more than 2 pieces and fixing the same to the wall using tapered inverted wooden plugs screws etc., **P No. 32/ I No. 2/f KPWD Electrical SR 2010-11**	Each							
			7				7	285.00	1995.00
12	Supplying of LTUG cable having aluminium condutor PVC insulated shethed, galvnised steel, wire / steel tap armoured cable with PVC outer sheathing 1.1 KV class **P No. 68/ I No. 4(d) 4 core 16 Sqmm KPWD Electrical SR 2010-11**	Mtr							
			7	25.00			175.00	150.00	26250.00
	for Existing borewell		1	200.00			200.00	150.00	30000.00
13	Labour charges for laying of 1.1 K.V class UG cable (PWD Electrical SR-1999-2000, **P No. 69 / I No. Ia In existing trencg/duct 6Sqmm to 16 Sqmm) KPWD Electrical SR 2010-11**	Mtr							
			7	25.00			175.00	8.00	1400.00
14	Digging or trenching of 0.6m deep x 0.5 mtr wide refilling the trench to the required ground level and consolidating etc., complete (as per Civil SR KSRB **1-2 P-7) P No. 70/ I. No. 6-c KPWD Electrical SR 2010-11**	Mtr							
	For Cutting Road Surface		7	16.00			112.00	60.00	6720.00
15	Supplying and fixing of Class A (meaium duty) GI pipe of wall thickness not less than 3.25mm on pole/wall/drain crossing with necessary clamping arrangements for UG cable of 1.1 KV class **P. No. 70/ I No.9-A KPWD Electrical SR 2010-11**	Mtr							
	40mm dia GI pipe		7	4.00			28.00	240.00	6720.00
16	Supplying and fixing L.T. cast Iron pot head suitable for 1.1 KV class UG cable filled with necessary bituumen/insulating compound complete with terminals, clamps, bolts, nuts and washers etc., **P. No. 70/ I No. 10-b KPWD Electrical SR 2010-11**	No.							
	16Sqmm		7				7.00	260.00	1820.00
17	Supplying, fixing, wiring, earth electrode for grounding conduits, I.C cutouts and other equipments on the meter board using 40 mm dia 2.90 mm thick GI pipe 2.5 m long buried in a pit. The pit should be filled with equal propotion of solt and charocoal 150 mm alround the pipe to complete depth. The connection from the pipe to the conduit etc., is to be established through GI wire of size, as per ISI specification 7.3.3 IS 732 using 12 mm dia bolts, nuts, washers and check nuts, etc., the pipe shall have 16 throught holes of 122 mm dia, (PWD Electrical SR-1999-2000, **(P No.68, I No. 1) KPWD Electrical SR 2010-11**	No	7				7	1950.00	13650.00
18	Supplying and fixing of Porcelain fuse channel with cut out on existing wooden / panel using necessary nuts, bolts and washer etc., complete.... **P No. 32/I No 3b KPWD Electrical SR 2010-11**	No.							
	32 Amps		28				28	100.00	2800.00

Sl No	Description of item	Unit	No	L	B	D	Qty	Rate	Amount
	KSRB 13-7.1-4 Providing and fixing in position 50mm nominal bore gun metal non-return valve horizontal type of approved make including cost of all materials, labour and HOM of equipments with all leads complete as per specifications NO KBS 13.2.16 / 13.13 **Page No. 82Item No. 13.55 / PWD SR 2010-11**	Nos							
			7				7	1135.08	7946.00
	Basic Rate	1051.00							
	Area Weightage @ 8%	84.08							
	Total	1135.08							
20	Providing NP/CP waste unions conforming to ISI specifications and fixing them in position as per directions including cost of materials, fixtures and conveyance to work spot etc., complete P. No. 84 / I. No. 13.81.3 **PWD SR 2010-11**	No							
	50mm dia		7				7	205.20	1436.00
	Basic Rate	190.00							
	Area Weightage @ 8%	15.20							
	Total	205.20							
21	Supplying and fixing 50mm dia GI X nipple with ISI mark with all lead and lift loading unloading and labour charges etc coomplete	No							
			7	4.00			28	80.00	2240.00
22	Supplying shunt capaitors conforming to IS 2834, 3phase 400/440 volts grade for power factor improvement of rotating machinery, Capacitor in KVAR rating Nos. 2KVAR capacity with all lead and lift =, loading, unloading and labour charges etc complete as per specifications	No							
			7				7	350.00	2450.00
23	Supplying and fixing miniature circuit breakers/solaters on existing MCB distribution boards using necessary fixing materiasl wiring complete as requireds 5 to 30 amps triple pole with all lead and lift, loading, unloading and labour charges etc complete as per specifications	No							
			7				7	1000.00	7000.00
24	Fabrication supplying and mounting MS box of 16 SWG suitable for floor /wall mounting, fully weather proof with provision for better heat dissipation, provided with hinged front cover, equipped with tamper proof locking arrangements, with suitable size clamps with necessary cable entry pipe with gland and box should be finished 2 coats of red oxide primer paint and finally finished with approved colour enamelled metal paint etc., complete box of 21600 sqcm @ Rs.0.33 **P.No. 41, I. No. 38B KPWD Electrical SR 2010-11**	Sq.Cm							
	16SWG		28	120.00	60.00		201600.00		
			7	360.00	25.00		63000.00		
	for Existing borewell		28	120.00	60.00		201600.00		
			7	360.00	25.00		63000.00		
							529200.00	0.33	174636.00

Sl No	Description of item	Unit	No	L	B	D	Qty	Rate	Amount
25	Supplying and delivery at site brand new star / Essen/ Lotus/Sun-shines/Adarsh/ GK Controls best indigenous make combined energy meter - cum- control panel board unit of size 600x450 x200 mm minimum mechanically strong vermin and water proof. The unit shall have two detachable doors suitable for operation on 3 ph, 50Hz, 380/440 volts, A.C supply with spring loaded latch, locking device with a key ribs should be provided inside the door, canopy apron and louvers ventilators shall be provided. the combined energy meter cum- control panel board unit suitable for operation. The panel board shall be fabricated on single unit in the above components for suitable pumpset. **15HP to 30 HP Star Delta Starter SERDED Rate**	No.							
			7				7	7000.00	49000.00
	for Existing borewell		7				7	7000.00	49000.00
26	KSRB 13.6.3-6 Providing and fixing in position brass gate valve with C.I wheel of approved quality (screwed end) **50mm** nominal bore including cost of all materials, labour and HOM of equipments with all leads complete as per specifications. Specification No. KBS 13.2.6/13.3 **(P.81/I.13.37 PWD SR - 2010-11)**	Each							
			7				7		
	for Existing borewell		7				7		
							14	1612.44	22574.00
	Basic Rate	1493.00							
	Area Weightage @ 8%	119.44							
		1612.44							
27	Earth work excavation for pipeline trenches including depositing on bank upto a lead of 50 mtrs. Including shoring and strutting danger lighting and using sight rails and boning rods at every 100 mtrs wherever necessary as directed in the following strata manual means in hard soil PRED SR								
		Cum	1	1800.00	0.45	0.60	486.00	202.00	98172.00
28	Providing and instalation at site of works P.V.C Pipes including cost of pipes and specials and incluidng lowring into trenches, laying true to line, level and perfect linking at joints, leak proof including jointing encasing the pipe alround to a depth Not less than 15cm with grave or selected earth avalabile from the execavation Etc., **Page No.12 item No.3.4.2 b PRED SR 2010-11.**	Rmtr							
	75 mm dia 6 KSC PVC pipe		1	300.00			300.00	117.00	35100.00
	63mm dia 6KSC		1	1500.00			1500.00	88.00	132000.00
29	Refilling of basement and pipeline trenches with selected available earth from trench excavation including watering, Consolidation in layers of 15cm thick including disposing of the surplus earth with a lead of 200 Mtrs								
		Cum	Qty same as item No 28				486.00	58.00	28188.00

Sl No	Description of Item	Unit	No	L	B	D	Qty	Rate	Amount
	KSRB 13.3.2 Providing and fixing in trenches galvanised / mild steel tubes (medium grade) 20mm dia nominal bore with all fittings (earth work in trenches to be measured and paid for separately) including cost of all materials, labour, charges HOM of equipments complete as per specifications Specification Page No. 94/ Item No. 13.11 / PWD SR 2011-12								
		Rmt	7	5.00			35.00	140.40	4914.00
	basic Rate	130.00							
	Area Weightage @ 8%	10.40							
	Total	140.40							
30	Providing and constructing platform in CC 1:2:4 proportion using hard granite or basalt or trap jelly of 20mm down size for india MARK -III (VLOM) hand pump as per approved drawing enclosed to the SR According to IS 13056: 1991 (UNICEF Standards) including machine mixing, laying, tamping curing and smooth finishing to exposed faces in C.M 1:3 with necessary moulds including earthwork excavation with all leads for materials etc complete								
	at Kenchenahalli	Each	1	4			4	7691.76	30767.04
	basic Rate	7122.00							
	Area Weightage @ 8%	569.76							
	Total	7691.76							
31	KSRB 13-4.1 Making connection of G.I distribution branch with G.I. main of 25 to 40mm nominal bore, including bore, including cutting and threading the pipes, providing and fixing Tee, nuts, labour for all item of works, testing and HOM of equipments complete as per specifications Specification No. KBS 13.20 Page No. 95/ Item No. 13.20 / PWD SR 2013-14								
		Nos	7	5.00			35.00	330.48	11566.80
	basic Rate	306.00							
	Area Weightage @ 8%	24.48							
	Total	330.48							
31	KSRB 13-1.3 : Providing and fixing to wall, ceiling and floor galvanised / mild steel tube 25mm dia nominal bore with fittings (medium grade weight 2.51 kg/mtr) B class including cost of all materials, labour charges, HOM of equipments and testing complete as per specifications no. KBS13.2.14/13.8 Page No. 93/ Item No. 13.3 SR 2013-14								
		Nos	75	2.00			150.00	316.44	47466.00
	basic Rate	293.00							
	Area Weightage @ 8%	23.44							
	Total	316.44							
32	50mm Dia GI Coller Heavy Duty PRED	Nos	7				7	130.00	910.00
33	50 mm dia GI Union PRED	Nos	7				7	180.00	1260.00
34	50mm Dia GI Elbow PRED	Nos	7				7	120.00	840.00
35	160mm dia Borewell cap with clamp set H/D PRED	Nos	7				7	695.00	4865.00
36	50mm Dia GM gate Valve IS 778/84 PRED	Nos	10				10	918.00	9180.00

Sl No	Description of item	Unit	No	L	B	D	Qty	Rate	Amount
37	50mm dia GM Non return valve IS:778/84 PRED	Nos	26				26	856.00	22256.00
	Flange set	set	20				20	710.00	14200.00
	Public fountain		50				50	5000	250000.00
38	BESCOM Deposit charge		7				7		
	for Existing borewell		6				6		
							13	18000	234000.00
40	KRIDL charges + Labourcess (11%)								495000.00
41	Miscellenous charges								1687.16
								Total	4500000.00

(Rupees Forty five Lakhs Only)

CERTIFICATE :

1 The work spot has been inspected and the work is found necessary.
2 This estimate is prepared as per C.S.R. of PWD 2011-12, PWD Electrical 2010-11, PRED 2010-11 & SE-RDED approved Rate
3 The provisions were made in this estimate are necessary and adequate.
4 This works come under B.B.M.P. limits.

Ramangouda

Assistant Engineer

Assistant Executive Engineer
Yelahanka Sub Division
Bangalore-64

28/1/14

Executive Engineer
Yelahanka Division
Bangalore-64

ADMINISTRATIVELY SANCTIONED FOR Rs 45.00 Lakh

Rupees Fourty Five Lakh only

P-2654

( ) No.

conditions contained in

no EE ( ) No.

Estimate A/Sanction

JC/Yel/AA/792/13-14

5-2-14 Rs 45.00 Lakh

Joint Commissioner
(Yelahanka Zone)
BBMP, Bengaluru-92

Sanction for Rs 45.00 Lakh

Fourty Five Lakh only

is accorded under head P-2654

registered as CE No ...../.....Subject

to Conditions contained in enclosed memo

No. CE/Yel/TE/234/13-14 5-2-14

AE(E) EA SE (PWD) CE (RTP)